OIPE

# CRF Errors Corrected by the STIC Systems Branch

**Serial Number:** 08/846,589

CRF Processing Date: _____
Edited by: _____
Verified by: _____ (STIC sta...

**ENTERED**

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically: _____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☐ Deleted extra, invalid, headings used by an applicant, specifically: _____

☑ Deleted: ☑ non-ASCII "garbage" at the beginning/(end of files;) ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other: _____
_____
_____
_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING          DATE: 05/24/2001
PATENT APPLICATION:  US/09/846,589          TIME: 16:27:17

Input Set : **A:\Cpg.pto**
Output Set: **C:\CRF3\05242001\I846589.raw**

```
   3 <110> APPLICANT: Famodu, Layo O.
   4         Simmons, Carl R.
   6 <120> TITLE OF INVENTION: Plant Aminoacyl-tRNA Synthetase
   8 <130> FILE REFERENCE: BB-1191
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/846,589
C--> 11 <141> CURRENT FILING DATE: 2001-05-01
  13 <150> PRIOR APPLICATION NUMBER: 60/092,866
W--> 14 <151> PRIOR FILING DATE: July 15, 1998
  16 <160> NUMBER OF SEQ ID NOS: 29
  18 <170> SOFTWARE: Microsoft Office 97
  20 <210> SEQ ID NO: 1
  21 <211> LENGTH: 1948
  22 <212> TYPE: DNA
  23 <213> ORGANISM: Zea mays
  25 <400> SEQUENCE: 1
  26 cgcacgatag ccgccgccgt cgaccagagc actcccccgt cgtcgccacg atgtcgtctg   60
  27 agcctccacc cgcctcctct gccgccgccg gagaggaact cgctgctgac ctttccgccg  120
  28 ctaccctcag caagaagcag cagaagaagg acgcgaggaa ggcggagaag gcagagcagc  180
  29 gccagcgtca gcagcagcag cagcagcagc cggcggacgc cgaggacccg ttcgcggcca  240
  30 actacggcga ggtccccgtc gaggagatcc agtcaaaggc catctccggc cgctcgtggt  300
  31 cccatgtcgg cgacctcgac gactccgctg cgggccgctc cgtgcttatc cgcggagccg  360
  32 cgcaggccat ccgtccggtc agcaagaaga tggctttcgt cgtgctgcgc cagagtatga  420
  33 gcaccgtgca gtgcgtgctc gtcgccagcg ccgacgccgg cgtcagcacg cagatggtgc  480
  34 gcttcgccac cgccctcagc aaggagtcca tcgtcgacgt tgagggcgtc gtctccctcc  540
  35 caaaggagcc cctcaaggcc accacacagc aggttgagat ccaagtgagg aagatctatt  600
  36 gcatcaatag ggctattccg acccttccaa ttaaccttga agatgcggct cggagtgagg  660
  37 cagattttga gaaggctgaa ttggctggag aaaagcttgt tcgcgttggc caagataccc  720
  38 gcttgaacta cagagctatt gatctacgaa caccctcgaa tcaagccata ttccggatcc  780
  39 agtgtcaagt tgaaaacaaa tttagagatt ttttgttgtc gaagaacttt gtcgggatcc  840
  40 acaccccaaa attgatttct ggatctagtg aagggggtgc ggctgtattc aagcttctgt  900
  41 acaatggtca acctgcttgt ttggcacaat cccctcagtt atacaagcaa atggctatct  960
  42 ctggtggttt tgagcgagta tttgaggtcg gccctgtgtt tagagcagaa aattcaaaca 1020
  43 cacacaggca tctatgtgag ttcgttggtc ttgatgctga aatggagatt aaggagcatt 1080
  44 attttgaggt ctgtgacatt atagatggct tattcgtatc aatatttaaa cacttgtctg 1140
  45 aaaactgcaa gaaagaactc gaatcaataa acaggcagta tccatttgaa cctctgaagt 1200
  46 atctagacaa aacctttaag ctcacttatg aagaaggaat tcaaatgttg aaggaagccg 1260
  47 gaacagaaat cgagcctatg ggtgacctca ataccgaagc tgagaaaaaa cttggtcggc 1320
  48 ttgtcaggga aaagtatgac acagattttt tcatcctgta tcggtatcct ttggctgtac 1380
  49 gtccgttcta caccatgcct tgttatgaca acccagcgta caccaattct tttgatgtct 1440
  50 tcattcgagg cgaggagata atatctggag cacaaaggat acacactcct gagctgctgg 1500
  51 ccaagcgcgc gacagagtgt ggaatcgacg tgagcactat ctcggcctac attgaatcct 1560
  52 tcagctatgg cgtgccgcca cacggcggtt cggggtgggg tttggagagg gtggtgatgc 1620
  53 tgttctgtgc cctgaacaac atcaggaaga cctccctgtt cccgcgcgac ccgcagaggc 1680
  54 tcgtgccgta agtttctgat tccaagcctg agtcttcgag tggtctacgg agcagatccg 1740
  55 atgttgttac catcagagtt gacttgcaat cttagctcct gaacctggcg gttaccgtgg 1800
  56 atcagagttc ctgttgaatt tcacaaaagc ctacttgttc ctaatagatt gctgcaacca 1860
  57 acaatattac gacccttccg ggctttctt cccgcctcac gtgttattct ggtctatact 1920
```

RAW SEQUENCE LISTING
PATENT APPLICATION:  **US/09/846,589**

DATE: 05/24/2001
TIME: 16:27:17

Input Set : **A:\Cpg.pto**
Output Set: **C:\CRF3\05242001\I846589.raw**

```
58 tgttttttaag tgcaagtatt gctcagtt                                    1948
60 <210> SEQ ID NO: 2
61 <211> LENGTH: 546
62 <212> TYPE: PRT
63 <213> ORGANISM: Zea mays
65 <400> SEQUENCE: 2
66 Met Ser Ser Glu Pro Pro Pro Ala Ser Ser Ala Ala Ala Gly Glu Glu
67 1               5                   10                  15
69 Leu Ala Ala Asp Leu Ser Ala Ala Thr Leu Ser Lys Lys Gln Gln Lys
70             20                  25                  30
72 Lys Asp Ala Arg Lys Ala Glu Lys Ala Glu Gln Arg Gln Arg Gln Gln
73          35                  40                  45
75 Gln Gln Gln Gln Gln Pro Ala Asp Ala Glu Asp Pro Phe Ala Ala Asn
76      50                  55                  60
78 Tyr Gly Glu Val Pro Val Glu Glu Ile Gln Ser Lys Ala Ile Ser Gly
79 65                  70                  75                  80
81 Arg Ser Trp Ser His Val Gly Asp Leu Asp Asp Ser Ala Ala Gly Arg
82              85                  90                  95
84 Ser Val Leu Ile Arg Gly Ala Ala Gln Ala Ile Arg Pro Val Ser Lys
85              100                 105                 110
87 Lys Met Ala Phe Val Val Leu Arg Gln Ser Met Ser Thr Val Gln Cys
88          115                 120                 125
90 Val Leu Val Ala Ser Ala Asp Ala Gly Val Ser Thr Gln Met Val Arg
91      130                 135                 140
93 Phe Ala Thr Ala Leu Ser Lys Glu Ser Ile Val Asp Val Glu Gly Val
94 145                 150                 155                 160
96 Val Ser Leu Pro Lys Glu Pro Leu Lys Ala Thr Thr Gln Gln Val Glu
97                 165                 170                 175
99 Ile Gln Val Arg Lys Ile Tyr Cys Ile Asn Arg Ala Ile Pro Thr Leu
100             180                 185                 190
102 Pro Ile Asn Leu Glu Asp Ala Ala Arg Ser Glu Ala Asp Phe Glu Lys
103          195                 200                 205
105 Ala Glu Leu Ala Gly Glu Lys Leu Val Arg Val Gly Gln Asp Thr Arg
106      210                 215                 220
108 Leu Asn Tyr Arg Ala Ile Asp Leu Arg Thr Pro Ser Asn Gln Ala Ile
109 225                 230                 235                 240
111 Phe Arg Ile Gln Cys Gln Val Glu Asn Lys Phe Arg Asp Phe Leu Leu
112              245                 250                 255
114 Ser Lys Asn Phe Val Gly Ile His Thr Pro Lys Leu Ile Ser Gly Ser
115              260                 265                 270
117 Ser Glu Gly Gly Ala Ala Val Phe Lys Leu Leu Tyr Asn Gly Gln Pro
118      275                 280                 285
120 Ala Cys Leu Ala Gln Ser Pro Gln Leu Tyr Lys Gln Met Ala Ile Ser
121      290                 295                 300
123 Gly Gly Phe Glu Arg Val Phe Glu Val Gly Pro Val Phe Arg Ala Glu
124 305                 310                 315                 320
126 Asn Ser Asn Thr His Arg His Leu Cys Glu Phe Val Gly Leu Asp Ala
127          325                 330                 335
129 Glu Met Glu Ile Lys Glu His Tyr Phe Glu Val Cys Asp Ile Ile Asp
```

RAW SEQUENCE LISTING                    DATE: 05/24/2001
PATENT APPLICATION: **US/09/846,589**   TIME: 16:27:17

Input Set : **A:\Cpg.pto**
Output Set: **C:\CRF3\05242001\I846589.raw**

```
130              340              345              350
132 Gly Leu Phe Val Ser Ile Phe Lys His Leu Ser Glu Asn Cys Lys Lys
133         355              360              365
135 Glu Leu Glu Ser Ile Asn Arg Gln Tyr Pro Phe Glu Pro Leu Lys Tyr
136     370              375              380
138 Leu Asp Lys Thr Phe Lys Leu Thr Tyr Glu Glu Gly Ile Gln Met Leu
139 385              390              395              400
141 Lys Glu Ala Gly Thr Glu Ile Glu Pro Met Gly Asp Leu Asn Thr Glu
142             405              410              415
144 Ala Glu Lys Lys Leu Gly Arg Leu Val Arg Glu Lys Tyr Asp Thr Asp
145         420              425              430
147 Phe Phe Ile Leu Tyr Arg Tyr Pro Leu Ala Val Arg Pro Phe Tyr Thr
148         435              440              445
150 Met Pro Cys Tyr Asp Asn Pro Ala Tyr Thr Asn Ser Phe Asp Val Phe
151     450              455              460
153 Ile Arg Gly Glu Glu Ile Ile Ser Gly Ala Gln Arg Ile His Thr Pro
154 465              470              475              480
156 Glu Leu Leu Ala Lys Arg Ala Thr Glu Cys Gly Ile Asp Val Ser Thr
157             485              490              495
159 Ile Ser Ala Tyr Ile Glu Ser Phe Ser Tyr Gly Val Pro Pro His Gly
160         500              505              510
162 Gly Phe Gly Val Gly Leu Glu Arg Val Val Met Leu Phe Cys Ala Leu
163         515              520              525
165 Asn Asn Ile Arg Lys Thr Ser Leu Phe Pro Arg Asp Pro Gln Arg Leu
166     530              535              540
168 Val Pro
169 545
171 <210> SEQ ID NO: 3
172 <211> LENGTH: 730
173 <212> TYPE: DNA
174 <213> ORGANISM: Oryza sativa
176 <400> SEQUENCE: 3
177 gcacgagctt acacggcacg agcttacagg aattcaaatg ctgaaggaag ctggaacaga  60
178 aatcgaaccc atgggtgacc tcaacactga agctgagaaa aaactaggcc ggcttgttaa 120
179 ggagaagtat ggaacagaat ttttcatcct ctatcggtat cctttggctg tgcgtccctt 180
180 ctacaccatg ccttgttatg acaacccagc ttacagtaac tctttttgatg tctttattcg 240
181 aggagaggaa ataatatctg gagcacaaag aatacattta ccagagctat tgacgaaacg 300
182 tgcaacagag tgtggaattg atgcgagtac tatttcatca tatatcgaat cgttcagcta 360
183 tggtgcacct cctcatggtg gttttggtgt cggcctggag agggtggtaa tgctgttctg 420
184 cgccctaaac aacatcagga agacatcact tttccctcgc gatccacaaa ggctggtgcc 480
185 ataatttgct tttttttccca agagcaaggt ttggactcag tacggactgg gcagttttcc 540
186 tcggctggtt tttttacctg gacattattt tcgtatttat taatgtgctg tactgcaaaa 600
187 gctgctcctt tccacaacat ttggaatagt tgccgataca tttggaatag ggctcaacgt 660
188 tggcgttgtg atttcgttga tgatcccgct attcgtaaca aaaaaaaaaa aaaaaaaaaa 720
189 aaaaaaaaaa                                                       730
191 <210> SEQ ID NO: 4
192 <211> LENGTH: 148
193 <212> TYPE: PRT
194 <213> ORGANISM: Oryza sativa
```

```
196 <400> SEQUENCE: 4
197 Met Leu Lys Glu Ala Gly Thr Glu Ile Glu Pro Met Gly Asp Leu Asn
198  1               5                  10                  15
200 Thr Glu Ala Glu Lys Lys Leu Gly Arg Leu Val Lys Glu Lys Tyr Gly
201              20                  25                  30
203 Thr Glu Phe Phe Ile Leu Tyr Arg Tyr Pro Leu Ala Val Arg Pro Phe
204          35                  40                  45
206 Tyr Thr Met Pro Cys Tyr Asp Asn Pro Ala Tyr Ser Asn Ser Phe Asp
207      50                  55                  60
209 Val Phe Ile Arg Gly Glu Glu Ile Ile Ser Gly Ala Gln Arg Ile His
210  65                  70                  75                  80
212 Leu Pro Glu Leu Leu Thr Lys Arg Ala Thr Glu Cys Gly Ile Asp Ala
213                  85                  90                  95
215 Ser Thr Ile Ser Ser Tyr Ile Glu Ser Phe Ser Tyr Gly Ala Pro Pro
216              100                 105                 110
218 His Gly Gly Phe Gly Val Gly Leu Glu Arg Val Val Met Leu Phe Cys
219          115                 120                 125
221 Ala Leu Asn Asn Ile Arg Lys Thr Ser Leu Phe Pro Arg Asp Pro Gln
222      130                 135          ·      140
224 Arg Leu Val Pro
225 145
227 <210> SEQ ID NO: 5
228 <211> LENGTH: 1109
229 <212> TYPE: DNA
230 <213> ORGANISM: Glycine max
232 <400> SEQUENCE: 5
233 gcacgaggtc atcagagaga atggcttcac cgttcaatgc ttggtgcagg cgcaggccga   60
234 tacggtgagc ccgcagatgg tgaagttcgc cgctgcactc agccgcgagt ccatcgtcga  120
235 tgtcgaaggc gttgtttcga tcccctccgc tcccatcaaa ggcgccacac aacaggtgga  180
236 aattcaagtg aggaagttgt attgtgtcag tagggctgta cctactctgc ctattaatct  240
237 tgaggatgct gctcgaagtg aagttgaaat cgagacggct cttcaggctg gtgagcaact  300
238 tgttcgtgtt aatcaggata cacgtctgaa ctttagggtg cttgatgtgc gaacgccagc  360
239 taatcaaggg attttccgca ttcagtctca agttggaaat gcgtttagac aattcttatt  420
240 atctgaaggt ttttgtgaaa tccacactcc aaagttgata gctggatcta gtgagggagg  480
241 agctgctgtt tttagactgg actacaaagg tcaacctgca tgcctggccc agtcacctca  540
242 gcttcacaag caaatgtcta tttgtggaga ttttggccgt gtttttgaga ttggtcctgt  600
243 gtttagagca gaagattcct acactcacag gcatctgtgt gagtttacag gtcttgatgt  660
244 tgaaatggag attaagaagc attactttga ggttatggat atagtcgata gattgtttgt  720
245 cgcaatgttt gacagtttga accagaattg taagaaggat ctggaagctg tcgggtctca  780
246 gtatccattt gaacctttga agtatctgcg gacgacacta cggcttacat atgaagaagg  840
247 gattcagatg ctcaaggatg ttggagtaga aattgaacct tatggtgact tgaatactga  900
248 agcggaaagg aaattgggtc agctagtctc agagaaatat ggcacagagt tctatatcct  960
249 tcaccggtac cctttggctg taaggccatt ctatacaatg ccttgctacg acaatcctgc 1020
250 atacagcaac tcgtttgatg tctttattcg aggtgaggag ataatttcag gagctcagcg 1080
251 tgttcatgtg ccagaatttt tggaacaag                                    1109
253 <210> SEQ ID NO: 6
254 <211> LENGTH: 369
255 <212> TYPE: PRT
256 <213> ORGANISM: Glycine max
```

Input Set : A:\Cpg.pto
Output Set: C:\CRF3\05242001\I846589.raw

```
258 <400> SEQUENCE: 6
259 His Glu Val Ile Arg Glu Asn Gly Phe Thr Val Gln Cys Leu Val Gln
260   1               5               10              15
262 Ala Gln Ala Asp Thr Val Ser Pro Gln Met Val Lys Phe Ala Ala Ala
263           20              25              30
265 Leu Ser Arg Glu Ser Ile Val Asp Val Glu Gly Val Val Ser Ile Pro
266         35              40              45
268 Ser Ala Pro Ile Lys Gly Ala Thr Gln Gln Val Glu Ile Gln Val Arg
269     50              55              60
271 Lys Leu Tyr Cys Val Ser Arg Ala Val Pro Thr Leu Pro Ile Asn Leu
272 65              70              75              80
274 Glu Asp Ala Ala Arg Ser Glu Val Glu Ile Glu Thr Ala Leu Gln Ala
275             85              90              95
277 Gly Glu Gln Leu Val Arg Val Asn Gln Asp Thr Arg Leu Asn Phe Arg
278         100             105             110
280 Val Leu Asp Val Arg Thr Pro Ala Asn Gln Gly Ile Phe Arg Ile Gln
281         115             120             125
283 Ser Gln Val Gly Asn Ala Phe Arg Gln Phe Leu Leu Ser Glu Gly Phe
284     130             135             140
286 Cys Glu Ile His Thr Pro Lys Leu Ile Ala Gly Ser Ser Glu Gly Gly
287 145             150             155             160
289 Ala Ala Val Phe Arg Leu Asp Tyr Lys Gly Gln Pro Ala Cys Leu Ala
290             165             170             175
292 Gln Ser Pro Gln Leu His Lys Gln Met Ser Ile Cys Gly Asp Phe Gly
293         180             185             190
295 Arg Val Phe Glu Ile Gly Pro Val Phe Arg Ala Glu Asp Ser Tyr Thr
296         195             200             205
298 His Arg His Leu Cys Glu Phe Thr Gly Leu Asp Val Glu Met Glu Ile
299     210                 215             220
301 Lys Lys His Tyr Phe Glu Val Met Asp Ile Val Asp Arg Leu Phe Val
302 225             230             235             240
304 Ala Met Phe Asp Ser Leu Asn Gln Asn Cys Lys Lys Asp Leu Glu Ala
305             245             250             255
307 Val Gly Ser Gln Tyr Pro Phe Glu Pro Leu Lys Tyr Leu Arg Thr Thr
308             260             265             270
310 Leu Arg Leu Thr Tyr Glu Glu Gly Ile Gln Met Leu Lys Asp Val Gly
311         275             280             285
313 Val Glu Ile Glu Pro Tyr Gly Asp Leu Asn Thr Glu Ala Glu Arg Lys
314     290             295             300
316 Leu Gly Gln Leu Val Ser Glu Lys Tyr Gly Thr Glu Phe Tyr Ile Leu
317 305             310             315             320
319 His Arg Tyr Pro Leu Ala Val Arg Pro Phe Tyr Thr Met Pro Cys Tyr
320             325             330             335
322 Asp Asn Pro Ala Tyr Ser Asn Ser Phe Asp Val Phe Ile Arg Gly Glu
323         340             345             350
325 Glu Ile Ile Ser Gly Ala Gln Arg Val His Val Pro Glu Phe Leu Glu
326     355             360             365
328 Gln
331 <210> SEQ ID NO: 7
```

**VERIFICATION SUMMARY**                                    DATE: 05/24/2001
PATENT APPLICATION:  US/09/846,589                TIME: 16:27:18

Input Set : **A:\Cpg.pto**
Output Set: **C:\CRF3\05242001\I846589.raw**

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:14 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD

OIPE

RAW SEQUENCE LISTING                     DATE: 05/14/2001
PATENT APPLICATION:  US/09/846,589       TIME: 12:50:55

Input Set : A:\BB-1191 DIV SEQ LIST.txt
Output Set: N:\CRF3\05142001\I846589.raw

```
      3 <110> APPLICANT: Famodu, Layo O.
      4         Simmons, Carl R.
      6 <120> TITLE OF INVENTION: Plant Aminoacyl-tRNA Synthetase
      8 <130> FILE REFERENCE: BB-1191
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/846,589
C--> 11 <141> CURRENT FILING DATE: 2001-05-01
     13 <150> PRIOR APPLICATION NUMBER: 60/092,866
W--> 14 <151> PRIOR FILING DATE: July 15, 1998
     16 <160> NUMBER OF SEQ ID NOS: 29
     18 <170> SOFTWARE: Microsoft Office 97
```

Does Not Comply
Corrected Diskette Needed

p. 2

**ERRORED SEQUENCES**

```
   1753 <210> SEQ ID NO: 29
   1754 <211> LENGTH: 419
   1755 <212> TYPE: PRT
   1756 <213> ORGANISM: Bacillus caldotenax
   1758 <400> SEQUENCE: 29
   1759 Met Asp Leu Leu Ala Glu Leu Gln Trp Arg Gly Leu Val Asn Gln Thr
   1760   1                 5                  10                  15
   1762 Thr Asp Glu Asp Gly Leu Arg Lys Leu Leu Asn Glu Glu Arg Val Thr
   1763              20                  25                  30
   1765 Leu Tyr Cys Gly Phe Asp Pro Thr Ala Asp Ser Leu His Ile Gly Asn
   1766            35                  40                  45
   1768 Leu Ala Ala Ile Leu Thr Leu Arg Arg Phe Gln Gln Ala Gly His Arg
   1769        50                  55                  60
   1771 Pro Ile Ala Leu Val Gly Gly Ala Thr Gly Leu Ile Gly Asp Pro Ser
   1772   65                  70                  75                  80
   1774 Gly Lys Lys Ser Glu Arg Thr Leu Asn Ala Lys Glu Thr Val Glu Ala
   1775              85                  90                  95
   1777 Trp Ser Ala Arg Ile Lys Glu Gln Leu Gly Arg Phe Leu Asp Phe Glu
   1778            100                 105                 110
   1780 Ala Asp Gly Asn Pro Ala Lys Ile Lys Asn Asn Tyr Asp Trp Ile Gly
   1781            115                 120                 125
   1783 Pro Leu Asp Val Ile Thr Phe Leu Arg Asp Val Gly Lys His Phe Ser
   1784        130                 135                 140
   1786 Val Asn Tyr Met Met Ala Lys Glu Ser Val Gln Ser Arg Ile Glu Thr
   1787 145                 150                 155                 160
   1789 Gly Ile Ser Phe Thr Glu Phe Ser Tyr Met Met Leu Gln Ala Tyr Asp
   1790                 165                 170                 175
   1792 Phe Leu Arg Leu Tyr Glu Thr Glu Gly Cys Arg Leu Gln Ile Gly Gly
   1793            180                 185                 190
   1795 Ser Asp Gln Trp Gly Asn Ile Thr Ala Gly Leu Glu Leu Ile Arg Lys
   1796            195                 200                 205
   1798 Thr Lys Gly Glu Ala Arg Ala Phe Gly Leu Thr Ile Pro Leu Val Thr
   1799        210                 215                 220
```

RAW SEQUENCE LISTING                    DATE: 05/14/2001
PATENT APPLICATION:  US/09/846,589      TIME: 12:50:55

```
      Input Set : A:\BB-1191 DIV SEQ LIST.txt
      Output Set: N:\CRF3\05142001\I846589.raw

1801 Lys Ala Asp Gly Thr Lys Phe Gly Lys Thr Glu Ser Gly Thr Ile Trp
1802 225                 230                 235                 240
1804 Leu Asp Lys Glu Lys Thr Ser Pro Tyr Glu Phe Tyr Gln Phe Trp Ile
1805             245                 250                 255
1807 Asn Thr Asp Asp Arg Asp Val Ile Arg Tyr Leu Lys Tyr Phe Thr Phe
1808             260                 265                 270
1810 Leu Ser Lys Glu Glu Ile Glu Ala Leu Glu Gln Glu Leu Arg Glu Ala
1811             275                 280                 285
1813 Pro Glu Lys Arg Ala Ala Gln Lys Ala Leu Ala Glu Glu Val Thr Lys
1814     290                 295                 300
1816 Leu Val His Gly Glu Glu Ala Leu Arg Gln Ala Ile Arg Ile Ser Glu
1817 305                 310                 315                 320
1819 Ala Leu Phe Ser Gly Asp Ile Ala Asn Leu Thr Ala Ala Glu Ile Glu
1820             325                 330                 335
1822 Gln Gly Phe Lys Asp Val Pro Ser Phe Val His Glu Gly Gly Asp Val
1823             340                 345                 350
1825 Pro Leu Val Glu Leu Leu Val Ser Ala Gly Ile Ser Pro Ser Lys Arg
1826             355                 360                 365
1828 Gln Ala Arg Glu Asp Ile Gln Asn Gly Ala Ile Tyr Val Asn Gly Glu
1829     370                 375                 380
1831 Arg Leu Gln Asp Val Gly Ala Ile Leu Thr Ala Glu His Arg Leu Glu
1832 385                 390                 395                 400
1834 Gly Arg Phe Thr Val Ile Arg Arg Gly Lys Lys Lys Tyr Tyr Leu Ile
1835             405                 410                 415
1837 Arg Tyr Ala
E--> 1840 1
```

*Please delete the extraneous numeral at the end of the file. It is causing an invalid amino acid count for sequence #29.*

**VERIFICATION SUMMARY**        DATE: 05/14/2001
**PATENT APPLICATION:**  **US/09/846,589**        TIME: 12:50:56

Input Set : **A:\BB-1191 DIV SEQ LIST.txt**
Output Set: **N:\CRF3\05142001\I846589.raw**.

```
L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:14 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:1840 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:29
```